

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2004/000525

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04Q 11/00, H04L 5/00, H04J 1/00, H04L 12/42 // T04L 12/64B12
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04L, H04Q, H04J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 9943123 A1 (TELIA AB (PUBL)), 29 August 1999 (29.08.1999), page 1, line 1 - page 3, line 9, claims 1-28, abstract, cited in Application --	1-15
Y	MESTDAGH, D G et al: Zipper VDSL: a solution for robust duplex communication over telephone lines. In: Communications Magazine, IEEE, May 2000, pages 90-96, vol.38, issue 5, INSPEC AN: 6601305. See whole document --	1-15
A	EP 0991202 A1 (STMICROELECTRONICS SA), 5 April 2000 (05.04.2000), claims 1-5, abstract, cited in Application --	1-15

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

2 April 2004

Date of mailing of the international search report

24-06-2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6333920 B1 (NGUYEN, M-H ET AL), 25 December 2001 (25.12.2001), claims 19-22, abstract --	1-15
A	US 6373860 B1 (O'TOOLE, A J P ET AL), 16 April 2002 (16.04.2002), abstract -- -----	1-15

INTERNATIONAL SEARCH REPORT
Information on patent family members

31/03/2004

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PCT/SE 2004/000525

WO	9943123	A1	29/08/1999	AU	7458198 A	18/10/1999
				EP	1062760 A	27/12/2000
				SE	514016 C	11/12/2000
				SE	9800539 D	00/00/0000
				SE	9801150 A	22/08/1999
				WO	9948575 A	30/09/1999
				DE	69818998 D	00/00/0000
				EP	0991908 A,B	12/04/2000
				US	6382069 B	07/05/2002

EP	0991202	A1	05/04/2000	DE	69810293 D,T	13/11/2003
				JP	2000115032 A	21/04/2000

US	6333920	B1	25/12/2001	US	2001006509 A	05/07/2001

US	6373860	B1	16/04/2002	US	2002054597 A	09/05/2002
